WILKINSON ) BARKER KNAUER LLP

2300 N STREET, NW
SUITE 700
WASHINGTON, DC 20037-1128
TEL 202.783.4141
FAX 202.783.5851
WWW.wbklaw.com

April 26, 2007

# **VIA ECFS**

Marlene H. Dortch, Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Room TW-A325 Washington, DC 20554

Re:

Ex Parte Written Presentation

MB Docket No. 87-268

Dear Ms. Dortch:

On behalf of West Virginia Educational Broadcasting Authority ("WVEBA"), non-commercial licensee of WSWP-TV and permittee of WSWP-DT, Grandview, West Virginia, and pursuant to Section 1.1206 (b)(1) of the Commission's rules, the attached supplemental engineering technical statement is submitted for consideration in the above-captioned docket.

The attached statement is filed in support of WVEBA's request for a waiver of the 0.1 percent interference standard that would allow WSWP-DT to increase the allotted power on its tentative channel designation from 2.5 kW to 20 kW ERP. The attached statement rebuts the claim of Davis Television Clarksburg, LLC, permittee of WVFX-DT, Clarksburg, West Virginia (submitted in reply comments in the above-referenced docket), that under the appropriate FCC methodology the proposed power increase would result in predicted additional interference to WVFX-DT of 1.4 percent. WVEBA reaffirms its prior study (submitted in initial comments in the instant docket) showing that the proposed power increase would result in predicted additional interference of 0.7 percent to Fox affiliate WVFX-DT -- and even less from a Fox network perspective since some affected viewers can receive Fox programming from another affiliate. In any event, regardless whether the predicted additional interference is 1.4 percent or less than 0.7 percent, WVEBA submits that a waiver would serve the public interest for the reasons discussed in its January 25, 2007 Comments.

Marlene H. Dortch, Secretary April 26, 2007 Page 2

Please contact WVEBA's undersigned attorneys if you have any questions.

Respectfully submitted,

Kenneth E. Satten

Timothy J. Coon

cc: John Poutasse, counsel for Davis Television Clarksburg

WSWP-DT GRANDVIEW, WV Exhibit E, PAGE 1

# SUPPLEMENTAL ENGINEERING TECHNICAL STATEMENT IN MB DOCKET 87-268 PREPARED FOR WEST VIRGINIA EDUCATIONAL BROADCASTING AUTHORITY GRANDVIEW, WEST VIRGINIA - WSWP-DT

This engineering statement has been prepared on behalf of West Virginia Educational Broadcasting Authority ("WVEBA"), licensee of WSWP-DT (Facility ID No. 71680), in response to the reply comments submitted by Davis Television Clarksburg, LLC ("Davis Clarksburg"), permittee of WVFX-DT Clarksburg, West Virginia (Facility ID No. 10976), in connection with the Seventh Further Notice of Proposed Rule Making.<sup>1</sup>

# **BACKGROUND**

In an August 29, 2006 Public Notice, the Commission awarded WSWP-DT channel 10 but at a reduced power of only 2.5 kW in order to meet the 0.1 percent interference standard<sup>2</sup>. Subsequently WVEBA filed a request for waiver of the 0.1% interference threshold to increase the WSWP-DT ERP from 2.5kW to 20 kW. The OET69 analysis in WVEBA's waiver request predicts that the 20 kW WSWP-DT facility will cause 0.7% interference within the WVFX-DT service area. Davis Clarksburg conducted its own OET69 analysis and stated that "the operation of WSWP-DT at 20 kW will cause substantially more interference to WVFX-DT than claimed by WVEBA." Davis Clarksburg claims 1.4% of the WVFX-DT service population is predicted to receive interference from the 20kW WSWP-DT.

<sup>&</sup>lt;sup>1</sup> Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MB Docket No. 87-268, FCC 06-150, 21 FCC Rcd 12100 ("Seventh Notice").

<sup>&</sup>lt;sup>2</sup> Third Round of the DTV Channel Election Process: Tentative Channel Designations, DA 06-1675, 21 FCC Rcd 9572 (2006) at n.5.

WSWP-DT GRANDVIEW, WV Exhibit E, PAGE 2

# **DISCUSSION**

The Davis Clarksburg engineering narrative statement claims to make an "apples to apples comparison with the FCC's results" in their OET69 analysis. Davis Clarksburg specifies that they have conducted their studies on a Sunblade computing platform using the FCC's TV Interference and Spacing Analysis Program, they employ a 1 km terrain sample interval and 2 km cell side, and they count population using the 2000 census database. Although the stated hardware, software, and grid settings are appropriate in order to identically emulate the Commission's OET69 results, Davis Clarksburg has omitted which facilities are involved in building the WVFX-DT interference mask. It is well known that the addition and or deletion of adjacent TV and DTV facilities from an interference analysis can change the masking properties of the studied station and as a result can significantly change the unique interference percentage calculations.

The WVEBA OET69 analysis in the request for waiver was conducted as described in the following text from the Seventh Notice (¶21) (emphasis added):

"New interference to post-transition DTV operations was defined as interference beyond that caused by <u>existing analog and DTV operations</u>, as set forth in the certification database information. ... In performing conflict analysis, the staff applied the standard that an interference conflict exists when it was predicted that more than 0.1 percent new interference would be caused to another station."

WVEBA conducted its study in the request for waiver using the same hardware and software as the Commission in order to identically match the Commission's OET69 analysis. In conformance with the *Seventh Notice*, WVEBA also included a list of culled stations used in the analysis, which is repeated here for convenience:

#### **KESSLER AND GEHMAN ASSOCIATES, INC.**

WSWP-DT GRANDVIEW, WV Exhibit E, PAGE 3

Proposed Station
Channel Call City/State
10 WSWP-DT GRANDVIEW WV

ARN USERRECORD01

Stations Potentially Affected by Proposed Station

11	19	WVAH-TV	CHARLESTON WV	BLCT-19880421KF	N/A
11	19	WVAH-TV	CHARLESTON WV	BPCT-20030728ADD	N/A
11	11	WVPT-DT	STAUNTON VA	DTVPLN-DTVP0091	0.0%
11	11	WVPT	STAUNTON VA	BLEDT-20021220ADX	0.0%
11	11	$\mathtt{WJHL}\mathtt{-TV}$	JOHNSON CITY TN	BLCT-2111	0.0%
10	10	WVFX	CLARKSBURG WV	BPRM-20000328AAA	0.6%
10	10	WVFX	CLARKSBURG WV	BMPCDT-20020930AAV	0.7%
10	N/A	WAZT-CA	WOODSTOCK VA	BLTVA-20030718ADF	0.0%
10	30	WSLS-TV	ROANOKE VA	BLCT-19990813LD	N/A
10	31	WAVY-TV	PORTSMOUTH VA	BMLCT-19960821KE	N/A
10	10	WBIR-TV	KNOXVILLE TN	BLCT-19800109KE	0.1%
10	10	WIS	COLUMBIA SC	BPCT-20000501AEZ	0.0%
10	10	WIS	COLUMBIA SC	BLCT-20030210ABB	0.0%
10	32	WTAJ-TV	ALTOONA PA	BMLCT-20041201AWB	N/A
10	10	WOIO-DT	SHAKER HEIGHTS OH	DTVPLN-DTVP0076	0.0%
10	10	WOIO	SHAKER HEIGHTS OH	BLCDT-19991110AAR	0.0%
10	21	WBNS-TV	COLUMBUS OH	BLCT-19820708KF	N/A
10	10	WCPO-DT	CINCINNATI OH	DTVPLN-DTVP0075	0.0%
10	10	WNCT-DT	GREENVILLE NC	DTVPLN-DTVP0073	0.0%
10	10	WNCT-TV	GREENVILLE NC	BMPCDT-20040730ARH	0.0%
Chan ======	Channel	Call	City/State	Application Ref. No.	Int.
Current	Trans				Predict
	Post				

.-----

The stations that are both bold and underlined are facilities that will release their co-channel or adjacent channel facility relative to WSWP-DT. As instructed by the *Seventh Notice*, these facilities were included in the study and contribute to the WVFX-DT mask. For example, Station WIS currently uses channel 10 for analog but will be converting the channel to digital post transition. WIS was studied as both an analog and digital facility in two separate studies to formulate the WVFX-DT mask. The mask which exhibited the greatest amount of interference from WSWP-DT to WVFX-DT was used to generate the 0.7% interference figure. Using this masking scheme, WVFX-DT is predicted to receive 0.7% unique interference from WSWP-DT at 20 kW, as previously stated in the request for waiver.

WSWP-DT GRANDVIEW, WV Exhibit E, PAGE 4

Since Davis Clarksburg did not disclose a summary of stations which contribute to masking, WVEBA ran some hypothetical studies in order to attempt to replicate Davis Clarksburg's claimed 1.4% interference figure. When WVEBA ran an OET69 analysis that removed all the bold and underlined facilities from the table above, WVEBA was successful in replicating Davis Clarksburg's finding that WVFX-DT was predicted to receive 1.4% unique interference from the WSWP-DT 20 kW facility. As noted above, however, a study that removed all the bold and underlined facilities from the table above is not consistent with the *Seventh Notice*.

Moreover, it should be noted that when WVEBA conducted its OET69 analysis using the masking scheme described in the Seventh Notice, the number of network viewers affected by the predicted interference area caused by WSWP-DT is even lower than the 0.7% level set forth in WVEBA's waiver request. WVFX-DT and WVAH-DT are both FOX affiliates and have overlapping protected contour coverage areas. Exhibit E1 demonstrates the WVFX-DT and WVAH-DT overlapping contours and the WVFX-DT OET69 predicted coverage area. The blue 2 km<sup>2</sup> blocks represent the WVFX-DT unmasked coverage area and the red 2 km^2 blocks represent unmasked interference caused by the WSWP-DT 20 kW facility which would otherwise be blue or interference free. Exhibit E1 demonstrates that a relatively high density of the WSWP-DT interference area lies within the overlapping contour area. Exhibit E2 adds the WVAH-DT unmasked OET69 predicted coverage area and demonstrates that a significant portion of the red interference area demonstrated in Exhibit E1 disappears. This analysis demonstrates that some WVFX-DT viewers will be able to receive the same Fox programming content from WVAH-DT if WSWP-DT interferes with the WVFX-DT signal, with the result that the Fox network viewers predicted to receive interference from WSWP-DT will be actually be less than 0.7%.

WSWP-DT GRANDVIEW, WV Exhibit E, PAGE 5

### CONCLUSION

WVEBA has conducted a hypothetical study that appears to have replicated the Davis Clarksburg 1.4% interference claim. If Davis Clarksburg ran the study in this manner, then the Davis Clarksburg study is inconsistent with the Commission's Seventh Notice with regard to how the Commission treats existing analog and digital facilities in its own studies. If Davis Clarksburg ran their analysis in another manner other than what WVEBA hypothesizes, then it can be concluded that without a station listing or masking summary, Davis Clarksburg's interference percentage cannot be replicated and analyzed for accuracy. Either way Davis Clarksburg's 1.4% interference claim is not properly substantiated. Employing the Commission's Seventh Notice study criteria, WVEBA's OET69 analysis demonstrates that the WSWP-DT 20 kW facility is predicted to cause 0.7% interference to the WVFX-DT service area and even less from a Fox network perspective.

# **CERTIFICATION**

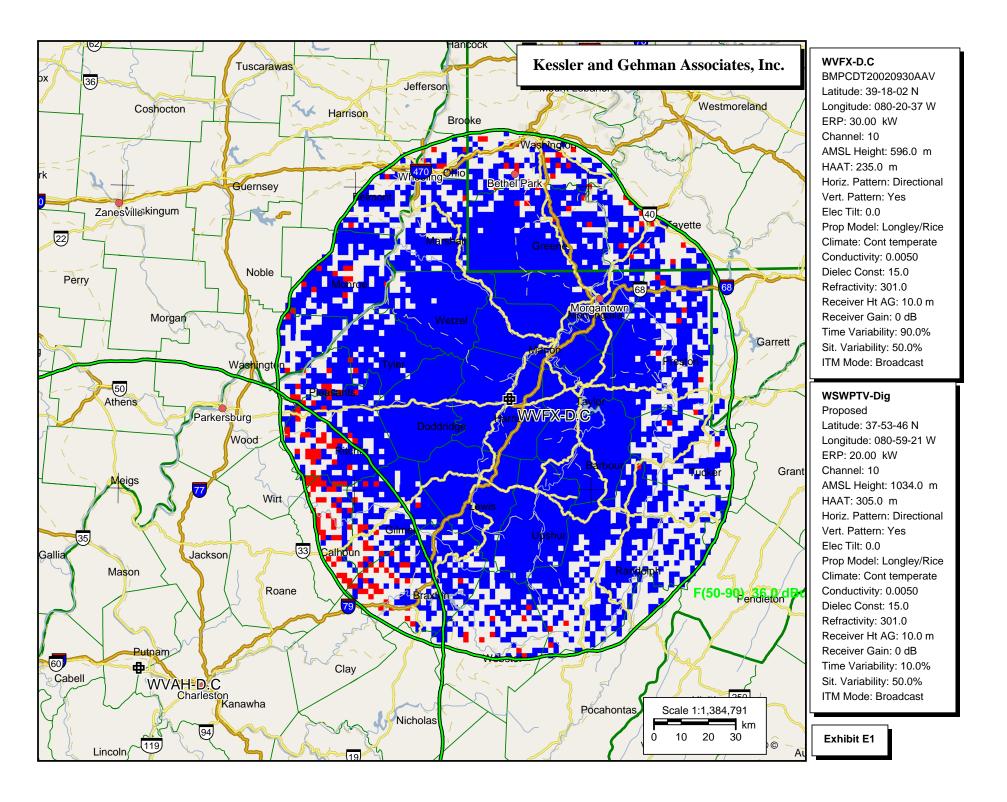
I, Ryan Wilhour, am an associate of Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida and have been working in the field of radio and television broadcast consulting since 1996. I am a graduate of the University of Florida with a Bachelor of Science degree in electrical engineering. The foregoing statement and the report regarding the aforementioned engineering work are true and correct to the best of my knowledge.

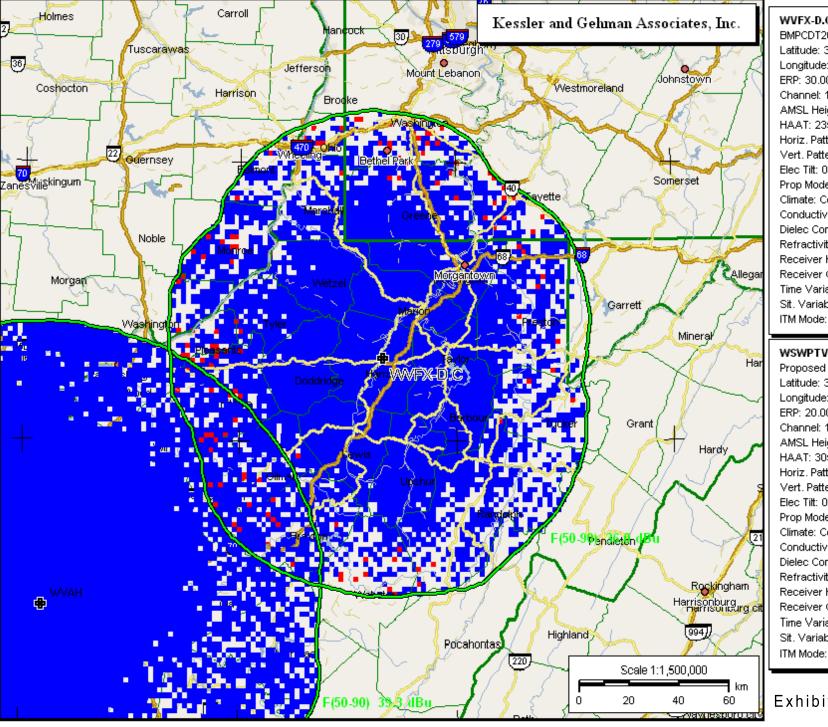
Ryan Wilhour

Consulting Engineer

Yan billow

April 25, 2007





#### WVFX-D.C

BMPCDT20020930AAV Latitude: 39-18-02 N Longitude: 080-20-37 W ERP: 30.00 kW Channel: 10 AMSL Height: 596.0 m HAAT: 235.0 m. Horiz, Pattern: Directional Vert. Pattern: Yes Elec Tilt: 0.0 Prop Model: Longley/Rice Climate: Cont temperate Conductivity: 0.0050 Dielec Const: 15.0 Refractivity: 301.0 Receiver Ht AG: 10.0 m Receiver Gain: 0 dB Time Variability: 90.0% Sit. Variability: 50.0% ITM Mode: Broadcast

#### WSWPTV-Dig

Latitude: 37-53-46 N Longitude: 080-59-21 W ERP: 20.00 KW Channel: 10 AMSL Height: 1034.0 m HAAT: 305.0 m. Horiz, Pattern: Directional Vert. Pattern: Yes Elec Tilt: 0.0 Prop Model: Longley/Rice Climate: Cont temperate Conductivity: 0.0050 Dielec Const: 15.0 Refractivity: 301.0 Receiver Ht AG: 10.0 m Receiver Gain: 0 dB Time Variability: 10.0% Sit. Variability: 50.0% ITM Mode: Broadcast

Exhibit E2